

Remarks

Claims 1-18 have been cancelled and new Claims 19-35 have been submitted. The newly submitted claims substantially track the original claims except for the small changes noted below. For the Examiner's convenience, the following chart shows the relationship between the old and new Claims and details the changes:

| New Claim | Old Claim(s) | Comment |
|-----------|--------------|---|
| 19 | 1 | reference to homologs have been removed; functional language has been added to the claim |
| 20 | 5 | the new Claim specifies the amino acid sequences have 20 amino acids identical to stated sequence; functional language has been added |
| 21 | 5 | the new Claim specifies the amino acid sequence is at least about 95% identical to the listed SEQ ID NO's |
| 22 | 5 | |
| 23 | 7 | dependency was changed |
| 24 | 8 | dependency was changed |
| 25 | 9 | dependency was changed |
| 26 | 10 | reference to homologs have been removed; the claim now specifies sequences 95% identical to listed SEQ ID NO's |
| 27 | 3 | |
| 28 | 1 | homolog language removed |
| 29 | 7 | the Claim dependency was changed |
| 30 | 8 | dependency was changed |
| 31 | 9 | dependency was changed |
| 32 | 17 | additional sequences added; reference to 45 nt regions removed; a recovery step was added to the method |
| 33 | 17 | additional sequences added; reference to 45 nt regions removed. |
| 34 | 17 | claim specifies sequences 95% identical to listed SEQ ID NO's |
| 35 | 17 | reference to 45 nt regions removed |

Claim 19 refers to nucleic acid molecules encoding proteins comprising at least 20 amino acids from specified SEQ ID NO's. Support for this language can be found in the specification.

Claim 20 refers to proteins having an amino acid sequence at least about 95% identical to specified SEQ ID NO's. Support for such language can be found in the specification, for example, on page 19, lines 1-3.

Claim 25 claims nucleic acid molecules at least about 95% identical to a nucleotide sequence from one of several specified SEQ ID NO's. Support for such nucleic acid molecules can be found in the specification, for example, on page 24, lines 19-22.

Claims 32 and 33 describe nucleic acid molecules encoding proteins comprising at least 20 amino acids from specified SEQ ID NO's and proteins at least about 95% identical to specified SEQ ID NO's. Since these claims are to a method of producing proteins using the claimed amino acids, support for such nucleic acids and proteins can be found as stated above. Claim 32 also has a second method step of "recovering the immunoregulatory protein". Support for this language can be found in the specification, for example, on page 33, lines 16-23 through page 34, lines 1-5.

Claim 34 describes nucleic acid sequences at least about 95% identical to a nucleotide sequence from one of several specified SEQ ID NO's. Support for such nucleic acid molecules can be found in the specification, for example, on page 24, lines 19-22.

Claim Objections

The Examiner has objected to the use of names such as 'nCaIL-5₁₆₅₈' when referring to nucleic acid molecules in the claims. Applicants note all such nomenclature has been removed and the new claims refer to nucleic acid sequences by SEQ ID NO.

Rejections Under 35 USC §122, first and second paragraph

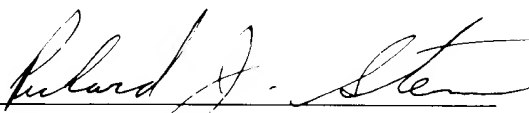
The Examiner has rejected all pending claims (1-18) for lack of written description and/or enablement. Specifically the Examiner contends the specification fails to adequately describe or enable any and all IL-5 variants as claimed. In addition, the Examiner states that some of the claimed variants, by definition, include only intron sequences and do not include any IL-5 coding sequence and that use of such variants would be unpredictable. Finally, the

been cancelled and replaced by new Claims 19-33. In the new claim set, all reference to variants and homologs has been removed. In addition, claims reciting a specified number of nucleotides or amino acids have been written so that the regions of identity refer to the coding region for IL-5 or to regions of IL-5 protein, and not intron sequences as was done in the previous claim set. Finally, Applicants note that claims referring to therapeutic compositions now state such compositions include recombinant cells or viruses and not naked DNA.

Applicants believe the newly submitted claim set to be in condition for allowance and therefore solicit immediate allowance from the Examiner. The Examiner is invited to contact the undersigned should any issues remain.

Respectfully submitted,

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